AMENDMENTS TO THE SPECIFICATION

Please amend Table 1 on page 10 as follows:

TABLE I

Type of electrode (w/w)	Analyte	K_m^{app} (μM)	I_{max} (μA)	S (mA/Mcm^2)	C (%)	DL (μM)
AO 87%	Histamine	279±16	1.03±0.02	50.57±0.82	19.0	0.16
HRP 13%	Putrescine	153±15	1.96±0.06	175.48±1.40	66.2	0.06
	H_2O_2	93±3	1.80±0.21	265.13±1.65	-	-
AO 80%	Histamine	332±17	~~1.03±0.03~~ 1.34±0.03	55.28±0.76	16.6	0.20
HRP 20%	Putrescine	228±15	3.01±0.07	180.84±0.95	54.7	0.07
	H_2O_2	112±8	2.07±0.06	330.23±1.02	-	-
AO 67%	Histamine	370±22	1.30±0.03	48.13±0.14	14.7	0.25
HRP 33%	Putrescine	240±15	3.10±0.01	176.94±0.87	54.2	0.07
	H_2O_2	153±6	3.64±0.04	325.90±0.56	-	-
AO 50%	Histamine	437±43	1.22±0.04	38.24±1.42	12.7	0.33
HRP 50%	Putrescine	268±23	3.05±0.10	155.90±1.26	52.0	0.08
	H_2O_2	175±8	3.83±0.05	299.80±0.65	-	-
AO 40%	Histamine	441±23	1.16±0.02	36.03±0.75	10.9	0.34
HRP 60%	Putrescine	276±22	3.69±0.06	183.14±1.11	55.7	0.13
	H_2O_2	206±3	4.94±0.03	328.50±0.22	-	-
AO 33%	Histamine	479±41	1.37±0.10	39.18±1.54	12.2	0.41
HRP 67%	Putrescine	287±12	3.84±0.06	183.28±0.61	57.0	0.08
	H_2O_2	211±18	4.95±0.15	321.36±1.24	-	-

Please amend the paragraph beginning at page 12, lines 12 as follows:

The influence of various components of the redox hydrogel on the biosensor characteristics is shown in Table IV. The increasing K_m^{app} in the presence of both PVI_{13}-dmeOs and PEGDGE demonstrated that the diffusion of the substrate was limited. This was because of the barrier formed by the mediator and/or cross-linking agent (rigidity of the redox hydrogel) on the surface of the electrode, which also resulted in an increased linear dynamic range. On the other hand, in the presence of crosslinked redox polycationic mediator (PVI_{13}-dmeOs), the I_{max} value was 100% increased suggesting that the final reduction step of the topa cofactor on the electrode surface is the rate-limiting step in the absence of the ~~methyldiator~~ mediator